

REMARKS

Reconsideration of the application is requested in view of the modifications above and the remarks below.

A. Rejection Under 35 USC 112, second paragraph

1. The Office Action rejected Claims 1-5 under 35 USC 112, second paragraph, alleging these claims lacked essential cooperative relationships of elements. Applicants' respectfully submit that the pending claims are definite. When read in light of the specification, one of ordinary skill in the art would understand the metes and bounds of Applicants' invention. Reconsideration is requested.

B. Objections

The Office Action objected to Claim 1 for certain informalities-it allegedly failed to recite -and- after "agent" in line 4. In view of the modifications above, the objection is believed overcome. Reconsideration is requested.

B. Rejection Under 35 USC 103

The Office Action rejected Claims 1-3 and 5 under 35 USC 103 over WO 97/39078 (Hater) in view of GB 1584170 (Peroxid-Chemie GMBH). The rejection should be withdrawn in view of the modifications above and the remarks below.

It is well settled that to establish a *prima facie* case of obviousness, the USPTO must satisfy all of the following requirements. First, the prior art relied upon, coupled with the knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or to combine references. *In re Fine*, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Second, the proposed modification must have had a reasonable expectation of success, as determined from the vantage point of one of ordinary skill in the art at the time the invention was made. *Amgen v. Chugai Pharmaceutical Co.* 18 USPQ 2d 1016, 1023 (Fed Cir, 1991), *cert. denied* 502 U.S. 856 (1991). Third, the prior art reference or combination of references must teach or suggest all of the limitations of the claims. *In re Wilson*, 165 USPQ 494, 496, (CCPA 1970).

Applicants' invention encompassed by Claims 1-3 and 5, relates to a composition for water treatment comprising a) biodegradable organic polymers

having repeating succinyl units, b) a biocidal oxidizing agent, and c) an unsubstituted or substituted amidosulphonic acid.

Applicants' invention is based on the discovery that the stabilizing effect of amidosulphonic acid on the polymer having recurring succinyl units. This effect is caused by the stabilizing of the oxidizing agent that now cannot decompose the polymer. Indeed, the test data on pages 11 to 13 of the specification show this effect. Even after 24 hours the chlorine content (oxidizing agent) is almost three times higher than in those experiments where no amidosulphonic acid has been added. As a consequence the chlorine did not decompose the polymer which guarantees the long term scale-inhibiting and/or corrosion-inhibiting activity of the polymer.

One of ordinary skill in the art following the teachings of Hater, singly or in combination with Peroxid-Chemie GmbH, would not have been motivated to modify Hater, make Applicants' invention, and expect the results Applicants evidence in the examples.


With respect to Hater, Hater does not contain any teaching that would have made one of ordinary skill in the art expect the stabilizing effect of amidosulphonic acid on the polymer having recurring succinyl units. Applicants discuss this reference in the specification (page 2), in which Applicants indicate that a disadvantage of the mixtures of Hater is the "fact that the polymers used there react to a considerable extent with microbicides such as chlorine, bromine or halogen-releasing products, which is observable by a decrease in the biocide concentration." Applicants further indicate that it "must be expected that owing to the reaction with the biocide, portions of polyaspartic acid are also destroyed, and that, as a result, the desired scale-inhibiting and/or corrosion-inhibiting activity is no longer achieved." In other words, the teachings of Hater are insufficient to obviate Applicants' invention.

Reconsideration is requested.

Peroxid-Chemie GmbH does not overcome the deficiencies of Hater. Peroxid-Chemie teaches the use of amidosulphonic acid with hydrogen peroxide being part of a germicide together with p-hydroxybenzoic acid--which is no polymer! Peroxid-Chemie GmbH does not does not contain any teaching that would have made one of ordinary skill in the art expect the stabilizing effect of amidosulphonic acid on the polymer having recurring succinyl units.

In view of the foregoing amendments and remarks, allowance of the pending claims is earnestly requested.

Respectfully submitted,

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